City of Santa Barbara
Public Works Department

Memorandum

DATE: February 16, 2011

TO: Creeks Restoration/Water Quality Improvement Program
Citizen Advisory Committee

FROM: Tom Conti, Project Engineer
Jessica W. Grant, Project Planner

SUBJECT: LOWER MISSION CREEK FLOOD CONTROL PROJECT LAGOON RESTORATION PLAN, AND HABITAT RESTORATION, ENHANCEMENT, MONITORING AND MANAGEMENT PROGRAM

COMMITTEE DIRECTION – FOR DISCUSSION

That the Committee receive a presentation and discuss the Lower Mission Creek Flood Control Project Lagoon Restoration Plan, and Habitat Restoration, Enhancement, Monitoring and Management Program

DISCUSSION

Project Goal

The purpose of the Lagoon Restoration Plan and Habitat Restoration, Enhancement, Monitoring and Management Program (Project) is to improve water quality and to restore habitat in the Mission Creek lagoon.

Project Approach

The proposed Project expands upon the water quality and habitat restoration plan conditioned by the Cabrillo Bridge Replacement Project, which involves restoration upstream of Mission Creek, between Cabrillo Boulevard and State Street, and from Cabrillo Boulevard to 200 feet on the east bank, and 100 feet on the west bank, downstream of Mission Creek. The Project planting at the lagoon would continue another 200 feet along the east bank and another 200 feet along the west bank.

The existing condition of the Mission Creek lagoon is dynamic and periodically breaks the sandbar during storm runoff events, and empties into the Pacific Ocean. The lagoon supports a variety of fish and invertebrates which in turn provide forage for a

variety of bird species. The lagoon varies in size from month to month and from year to year (Attachment 1 - Lagoon footprint over time). The area surrounding the lagoon is primarily a sandy beach habitat that has been degraded by trampling and various construction projects with landscaped areas (turf grass and palm trees) near Cabrillo Boulevard.

The lagoon planting area is designed to blend with the downstream planting area of the Cabrillo Bridge Replacement Project. Although the lagoon margins change based on creek outflows, tides, and storm surges, no grading of the project site is anticipated, and the natural lagoon configuration will not be altered. However, prior to planting, topography in the coastal dunes planting area will be "micro-graded" to create natural-looking dune hummocks of 24 inches in height. Due to the dynamic nature of the lagoon environment, the plantings are varied such that the best adapted plants will be expected to thrive. The restoration plan includes four zones of planting:

1. Coastal dune scrub on the upper slope between 10 and 13.5 feet in elevation.
2. Riparian scrub on the upper mid slope between 8 and 10 feet in elevation.
3. Transitional wetlands on the lower mid-slope between 6 and 8.6 feet in elevation.
4. Emergent wetlands on the lower mid slope between 5 to 7 feet in elevation.

Some of the elevation ranges for the different zones overlap somewhat to allow blending of the habitats. Plants to be installed for the different zones of the downstream planting areas are included in the Lagoon Restoration Plan (Attachment 2). This planting palette may be adjusted by the Restoration Biologist as necessary to accommodate field conditions.

Accompanying the Lagoon Restoration Plan is the Habitat Restoration, Enhancement, Monitoring, and Management Program (Attachment 3). This document will be used for both the Cabrillo Bridge Replacement and Lower Mission Creek Flood Control Project (LMCFCP) restoration efforts. The components of the Plan include: Introduction; Existing Conditions, Goals and Objectives of the Plan; Implementation Schedule; Personnel; Project Plans; Monitoring and Maintenance; Remedial Measures; Performance Evaluation and Reporting.

Project Background and Timeline

The Project's restoration effort is one part of the Lower Mission Creek Flood Control Project (LMCFCP). The LMCFCP is located along Mission Creek, in the West Downtown and Waterfront neighborhoods, from Canon Perdido Street to Cabrillo Boulevard to the ocean, a distance of about 1.3 miles. It will widen the creek channel to increase flood flow capacity in order to reduce flooding and property damage. Widening the channel will replace old concrete walls, and non-native invasive plants will be replaced with native riparian species. Natural creekbed improvements will be made to enhance the endangered species habitat for the Steelhead Trout and the Tidewater Goby. The benefits are increased flood protection, creek rehabilitation, and species habitat enhancement.

On April 9, 2009, the California Coastal Commission issued a Coastal Development and Consistency Certification for the LMCFCP. The City of Santa Barbara and Santa Barbara County Flood Control and Water Conservation District, together with the Army Corps of Engineers and Caltrans, are cooperating to implement the various components of this project as funding becomes available.

This summer, the County will begin the channel improvements for Reach 1A (just north of Cabrillo Bridge, between the State Street Bridge and the pedestrian bridge at the Harbor View Inn). The Cabrillo Bridge Replacement Project will occur in the fall of 2011, or spring of 2012. The goal is to time the LMCFCP Mission Lagoon Restoration Project with the construction of the Cabrillo Bridge Replacement Project's restoration plan, which will most likely occur in the summer of 2013. There is also a future Creek's Division Mission-Laguna Lagoon Restoration Project that will continue from the Project area to the Laguna Pump Station.

Budget

The Lower Mission Creek channel work is being funded by State Grant funds (Proposition 50) and the South Coast Flood Assessment funds. The City and County have entered into a cost sharing agreement, approved by Council on December 14, 2010, which outlines the funding for the Lagoon Restoration Project associated with the Lower Mission Creek Flood Control Project.

Attachment 3a - Lagoon Footprint Over Time
Attachment 3b - Lagoon Restoration Project Plans
Attachment 3c - Habitat Restoration, Enhancement, Monitoring and Management Program

cc: Pat Kelly, Assistant Public Works Director/City Engineer
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Cameron Benson, Creeks Restoration/Clean Water Manager

JG/kts